CONDUCTIVE THERMOPLASTICS WITH CARBON BLACK AND CARBON NANOFIBRILS

ABSTRACT OF THE DISCLOSURE

The present invention provides thermoplastic molding compositions that are electrically conductive, and which include a combination of carbon nanofibrils and particulate carbon compounds. The compositions of the present invention provide a combination of desirable properties, such as good melt flow, and compositions prepared there from have both low surface resistance and smooth surfaces. In particular, the present invention provides a thermoplastic composition that includes: (A) 99.6 to 10 parts by weight of at least one thermoplastic polymer; (B) 0 to 50 parts by weight of at least one rubber-elastic polymer; (C) 0.2 to 10.0 parts by weight of carbon nanofibrils; (D) 0.2 to 10.0 parts by weight of at least one particulate carbon compound; and (E) 0 to 50 parts by weight of at least one of filler and reinforcing substance.